

REMARKS

Claims 7 and 8 and 14 through 19 remain in the case, claims 1-6 and 9 through 13 being canceled by the foregoing amendment. The remaining independent claims 7 and 14 have each been carefully amended to clearly distinguish over the art cited.

Claims 5 and 6 were rejected under 35 USC 112, second paragraph, as being redundant. This rejection is respectfully traversed, particularly in light of the foregoing amendment.

Claims 5 and 6, together with claims 1-4 from which they depend, have now been canceled, thus obviating the bases for the instant rejection. These earlier oversights are regretted.

Claims 1-6, 8 and 14-19 were rejected under 35 USC 103(a) as obvious from the teachings of Lupien et al. in view of Bekaert et al. This rejection is respectfully traversed, particularly in light of the foregoing amendments and cancellations of some of the claims currently in issue.

Lupien appears to disclose an automated system which places buy and sell orders on the several securities markets and also accommodates direct transactions between the users of the system, thus blending and attenuating the market effect of large institutional investors. To render effective the large transaction volume of these massive investments the system is partly automated, including automated monitoring of parameters like the portfolio characteristics and other factors. In response thereto, or based thereon, the system then enters, alters or cancels buy and sell orders. (col. 2, line 60 to col. 3, line 14)

Unlike the Applicants' system, the Lupien system, as a part of this general high transaction volume process, then averages the transactions **for settlement by the clearing agent at the end of the day.** (col. 4, lines 32 -41) In addition to these averages the Lupien system provides for its internal users the process described by reference to Fig. 7 in which the inventory of securities is updated for 'variability' in step 32. (col.9, lines 54-58) Along with the variability the system also derives adjustments in step 34 to provide a 'normal' price (col. 9, lines 59-63) which is then analyzed together with a list of other parameters in step 38 to effect a buy and/or sell order in step 40. (col. 10, lines 9-64) Except for these general references to 'variability' and 'normals' this is the whole of the teaching in Lupien concerning any distributions, variances, auto or cross correlations or any other

Significantly, Lupien also recognizes that offsetting orders placed internally within the system can be immediately settled (col. 11, lines 51-55) and expressly recognizes the problem that the Applicants address in the following text:

"For orders that have been placed outside of the system due to direct connection with automated brokers and/or exchanges, such as INSTINET and the CINCINNATI Stock Exchange, through external data terminal 22, the speed of the cancellation or altering process depends on the response time of these other computers. By comparison, orders placed on other electronic routing systems, such as the Designated Order Turnaround (DOT) system of the New York Stock Exchange, for example, although entered by computer, still generally depend for execution on human specialists or traders who must ultimately react to the order. **Hence, undesirable and unexpected results are inherent.** This invention removes such problems. **Manual alteration of orders, although not usual due to the speed of operation of the system and the reliance on trading algorithms, is also available to clients at step 42.**"
(col. 11, at lines 26 through 37, emphasis added)

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Thus Lupien recognizes the problem addressed by the Applicants, but then wholly omits any solution except to suggest manual intervention by providing a manual override. No computer assistance for this manual process is even suggested and, in fact, the notion of a manual input is stated to be 'unusual' in light of the speed of the system.

Bekaert similarly does not suggest nor teach the solution to this problem envisioned by the Applicants. While admittedly Bekaert teaches autocorrelation analysis in which, for example, the lag is selected for matching the standard deviations of predicted inflation values with the actual values, this analysis is part of a pricing system for financial advisors and not part of the trade execution process. Other than the algorithms for analyzing these future trends there is no teaching nor suggestion of an autocorrelation process that is based on the current lag or delay between the placement of a securities trade order and its execution.

The Applicants, in total distinction, describe, and now positively recite, a security trade execution process in which an additional contract parameter is inserted in the form of a statistical distribution of a bracketing interval that is derived and continuously updated by autocorrelation analysis **based on the current time lag of the preceding transaction, i.e., the time difference between the preceding order and its execution.** (See e.g., specification at page 6, last line to page 7, line 7, emphasis added) Clearly, nothing like this is suggested anyplace in the art cited.

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Claims 7 and 9-13 were rejected under 35 USC 103(a) as obvious from the teachings of Lupien. This rejection is respectfully traversed, particularly in light of the cancellation of claims 9-13 and the extensive amendments to claim 7.

The remaining claim 7 has been carefully amended to recite all the distinctive aspects argued above. Applicants therefore submit as their argument directed at this rejection the same argument as has been set out above and respectfully solicit the Examiner's reconsideration on these bases.

Just four years ago our Supreme Court in *Dickinson v. Zurko*, 527 U.S. 150, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), held that the standard of review of these proceedings is now set by the Administrative Procedure Act [APA] **which mandates a reversal if the ruling is not supported by substantial evidence**, 5 USC 706(2)(E). Now supported on the pillars in *Zurko* the Federal Circuit in *In Re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed.Cir., 2000) imposed the substantial evidence test to findings of obviousness, reiterating its earlier reasoning in *In Re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (fed.Cir., 1999). Accordingly the *Dembiczak* rule is now imprinted with the Supreme Court mandate and **an express factual reference must exist in the record pointing to the suggestion of the combination of references in the prior art that is cited for the conclusion of obviousness**. We therefore quote at length from *Dembiczak*.

"Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. [Citations] ... **Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight**. [Citations] ..."

Dembiczak further states:

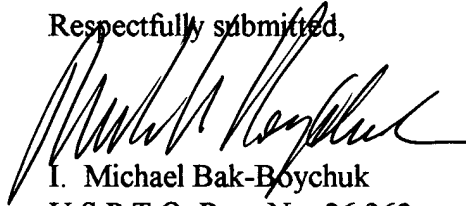
“In addition to demonstrating the propriety of an obviousness analysis, particular factual findings regarding the suggestion, teaching, or motivation to combine serve a number of important purposes, including: (1) clear exposition of the position taken by the Examiner ... “

175 F.3d at 998, 50 USPQ2d at 1616-1617, emphasis added

Per force, some suggestion of the totally different function and process needs to exist in the art cited to conform with this requirement. In stark contrast the Lupien teachings accept as a bother the exact problem these Applicants now solve while Bekaert doesn't even deal with the formalities of a securities transaction.

On all the foregoing bases it is respectfully submitted that all reasons for rejection have now been removed and an early notice of allowance is earnestly solicited.

Respectfully submitted,



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